## **Central Federal Lands Highway Division**

Project Schedule and Resource Management

Version (Date): July 22, 2005

Activity ID: G1 Activity Title: Preliminary Geotechnical

Activity Definition: Conduct preliminary geotechnical investigation, including visual and/or limited subsurface investigations pertaining to general roadway condition surveys, geotechnical hazards, anticipated excavations and structures, material sources, and general constructability issues.

Predecessor Activities (ID's) & Relationships (i.e.: FS, SS, or FF) & Time Lag:			Successor Activities (ID's) & Relationships (i.e.: FS, SS, or FF) & Time Lag:			
1. Pred: P1	Rel: FS	Lag: 0	1. Succ: I	D1 Re	el: FF	Lag: 20
2. Pred:	Rel:	Lag:	2. Succ: H	E2 Re	el: FS	Lag: 0
3. Pred:	Rel:	Lag:	3. Succ: (	G2 Re	el: FS	Lag: 0
4. Pred:	Rel:	Lag:	(	V1 Re On 3r Jobs	el: FF	Lag:
5. Pred:	Rel:	Lag:	5. Succ:	Re	el:	Lag:
6. Pred:	Rel:	Lag:	6. Succ:	Re	el:	Lag:

## Required Activity Tasks:

- 1. Assemble project background and setting information.
- 2. Develop a preliminary field investigation plan.
- 3. Obtain necessary access and drilling permits, utility clearances, etc.
- 4. Procure investigation services (drilling, test pits, geophysical surveys, traffic control, etc.).
- 5. Characterize general roadway and structures condition.
- 6. Identify roadway geotechnical repair areas.
- 7. Identify possible material sources.
- 8. Investigate potential cut/fill materials.
- 9. Complete all borings/excavations to a condition acceptable to the COTR.
- 10. Conduct lab testing for culverts, cut and fill materials, and material sources.

- 11. Identify geological and geotechnical hazards.
- 12. Identify constructability issues.
- 13. Prepare "Preliminary Geotechnical Report" summarizing field review, and including recommendations for the following:
  - Subsurface drainage.
  - Culvert materials.
  - Cut and fill slope ratios and construction requirements.
  - Suitable/unsuitable soils and aggregates by location.
  - Soil and rock shrink/swell properties.
  - Roadway repair requirements.
  - Topsoil depths and distribution.
  - Anticipated structure foundation requirements.
- 14. Review 30% plans.